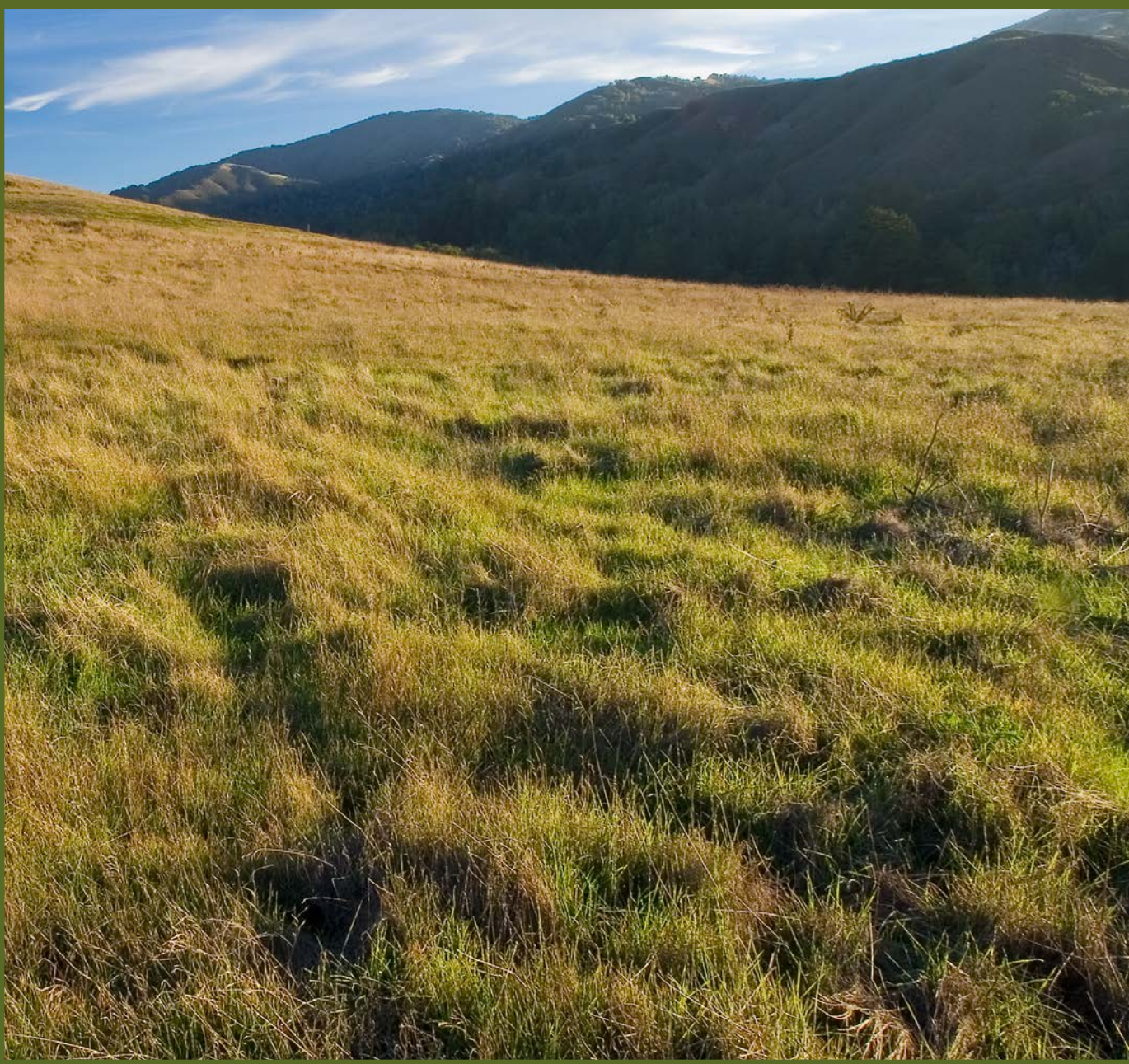


VA #1 Native Grassland Invaded by Nonnative Grasses



VA #2 California Grassland



VA #3 Ecological Succession 1

Grassland fire



VA #4 Ecological Succession 2



Burned grassland

VA #5 Ecological Succession 3

Early regrowth after fire

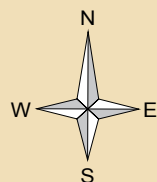


VA #6 Ecological Succession 4

Recovered grassland



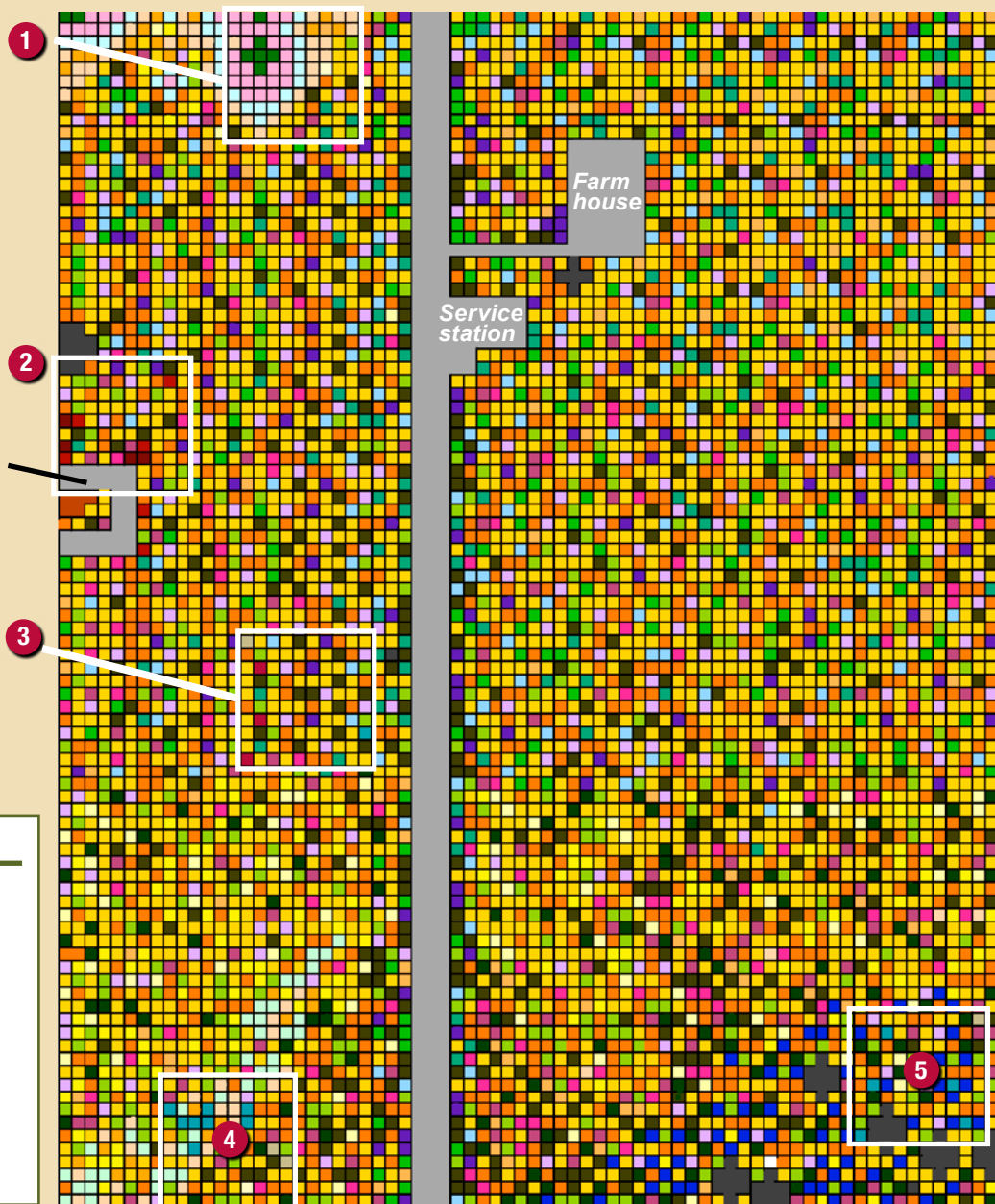
VA #7 Rancho Grassland Study Site



Key

Remains of
man-made
structures (roads,
buildings, other)

Each numbered white
square corresponds
to one of the **Sample
Grassland Plots**.



VA #8 Tree Rings



VA #9 Undisturbed Area in San Ramon Valley



VA #10 San Ramon Valley After Development



VA #11 Cumulative and Synergistic Effects on Grasslands

Human Activities

Prevent
controlled
burns

Build
houses
and other
buildings

Build
roads

Graze
livestock
year-
round

Plow to
create
farmland

Introduce
nonnative
plants

Planting
plants
with
diseases

Accumulating Effects

Allows
ecological
succession
to
woodland
habitat

Destroys
grassland
habitat

Destroys
grassland
habitat

Packs
soil,
native
grasses
cannot
survive

Grassland
plant
seeds do
not sprout

Gophers
and other
species
damage
soil more

Nonnative
species
replace
native
species

Crop
plants
replace
native
grasses

Synergistic Effects

**Nonnative species outcompete natives
in disturbed environments**

VA #12 Ecosystem Management

Ecosystem management: Actions and decisions of individuals, organizations, and government entities related to maintaining ecosystems, and providing ecosystem goods and ecosystem services for current and future generations.

Part 1

Instructions: Several different roles are involved in making decisions about ecosystem management. Identify at least three types of people or agencies within each category who make decisions about ecosystem management.

Decision makers:

decide what the objectives are

Analysts:

predict the consequences of different management strategies

Stakeholders:

have interest in the objectives, but do not have ownership or authority to make decisions



Ecosystem Management